



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,789	02/09/2005	Atsushi Tanno	OGW-0357	5705

7590 12/15/2008  
Patrick G. Burns - Greer, Burns & Crain, Ltd.  
Suite 2500  
300 South Wacker Drive  
Chicago, IL 60606

EXAMINER
----------

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
----------	--------------

3617

MAIL DATE	DELIVERY MODE
-----------	---------------

12/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/523,789

**Applicant(s)**

TANNO, ATSUSHI

**Examiner**

Jason R. Bellinger

**Art Unit**

3617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manabe (JP 10-278501). Manabe shows a rim with all of the physical features as set forth in the claims. The thickness of the disk portion is greater than at least thickness T(c).

Manabe does not disclose the relationship (i.e. the specific dimensions) of rim thicknesses of adjacent equal sections. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rim of Manabe with adjacent equal portions having average thicknesses of 0.5mm or more, generally being between 3-8mm on the disk side and 2-3mm on the flange side, in order to reduce the thickness (and thus weight) of the rim while still retaining suitable strength properties to prevent the rim from failing during use.

One of ordinary skill in the art at the time of the invention would have found it obvious to modify the wheel of Manabe in the manner set forth above, because choosing from a finite number of identified, predictable solutions, would yield a reasonable expectation of success. In this case, Manabe already teaches arranging a wheel rim to have different thicknesses at different locations along the rim. Furthermore, it is well known in the art that reducing the weight of a wheel increases handling

characteristics, etc. of the wheel. One known method of reducing the weight of a wheel rim is by varying the thickness of the rim, as taught by Manabe.

While Manabe does not specify the exact thicknesses, as set forth in the claims, it would have been obvious to try a variety of combinations of thicknesses until the desired result (i.e. performance, durability, etc. characteristics) was achieved. See *KSR International Co. v. Teleflex Inc.* 550 U.S. \_\_\_, 82 USPQ2d 1385 (April 30, 2007).

### ***Response to Arguments***

3. Applicant's arguments filed 9 September 2008 have been fully considered but they are not persuasive. The Applicant argues that the Examiner "has not fairly considered the test results" described in the specification and the previously filed declaration. This is not the case. The test results do not sufficiently prove "unexpected results". The results shown in Table 1 in the specification do not seem to qualify as being "unexpected". Instead, the results for "Present Invention Wheels 2-4" are not much lower than "Prior Art Wheel 1"; and thus seem to be predictable. See paragraph 2 above regarding *KSR International Co. v. Teleflex Inc.* 550 U.S. \_\_\_, 82 USPQ2d 1385 (April 30, 2007).

As shown in the table on page 5 of the Applicant's remarks, Present Invention Wheel 1 is only 0.1dB quieter than Prior Art Wheel 1, while Present Invention Wheel 2 is only 0.2dB quieter than Prior Art Wheel 1, and Present Invention Wheels 3-4 are only 0.5dB quieter than Prior Art Wheel 1. These numbers do not seem to qualify as a "marked improvement". The fact that the wheels of the present invention are lighter than

the prior art wheels has not been shown to be a factor in improving the road noise of wheels. Furthermore, the road noise produced by the prior art wheels do not seem to be "significantly larger" than that of the wheels of the invention. Furthermore, reducing road noise by "nearly 1 full decibel" does not seem to qualify as an unexpected result.

As explained in the rejection above, and the immediately preceding paragraph, the results of the present invention seem to be predictable under the guidelines of the KSR decision.

It should be noted that the arguments regarding the limitations drawn to dimensions has been addressed in the rejection above.

### ***Conclusion***

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/  
Primary Examiner  
Art Unit 3617